

**ABSTRACT**

Sensors for detecting catabolic proteinase enzymes and proenzymes in the fluid of a human or animal and methods for detecting the enzymes and then providing treatment that is specific for the detected enzyme are disclosed. The sensors of the present invention can be used to detect catabolic proteinase enzymes and proenzymes in the fluid of chronic wounds of humans and animals. Upon detection of any proteinase enzyme, the wound can be treated with an inhibiting complex that is specific for the detected enzyme or proenzyme. Enzymes such as matrix metalloproteinases and human neutrophil elastase in the active and proenzyme form can be detected and treatment provided with inhibitors for the detected enzyme.

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